REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The final Office Action of August 14, 2002, has been received and contents carefully reviewed.

Claims 1-56 are currently pending in this application. Reconsideration and reexamination of this application is respectfully requested.

The Examiner rejected claims 1-5, 7-22, 24, 26-33, 35-50, 52, and 54-56 under 35 USC § 103(a) *sic* as being unpatentable over *sic* Koma (US Patent No. 5,608,556) in view of Auman et al. (US Patent No. 6,139,926). Applicants respectfully traverse this rejection.

Independent claims 1 and 29 are allowable over the cited references at least for the reason that claims 1 and 29 recite a combination of elements including an electric field inducing window in said pixel region/electrode; and a photo-alignment layer having a pretilt angle on at least one of the first and second substrates. None of the cited references, singly or in combination, teaches or suggests at least this feature.

Koma does not teach or suggest the claimed invention as a whole. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983); see also *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976). The invention of this application comprises a multi-domain liquid crystal display device having an electric field inducing window and a photo-alignment layer having a pretilt angle on at least one substrate. Koma may teach an orientation control window, but fail to teach or suggest explicitly or implicitly a photo-alignment layer as recited by claims 1 and 29.

Further, the Applicant has discovered through experimentation that in the case of applying an alignment treatment, a high response time and a stable liquid crystal structure can be

obtained by a pre-tilt angle. See specification at page 13. Applicant has discovered the source of a problem with the conventional rubbing method and photo-alignment method and through experimentation, has identified a solution. Auman et al. is not attempting to solve similar problems with the same solution. "[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the 'subject matter as a whole', which should always be considered in determining the obviousness of an invention under 35 U.S.C. § 103." *In re Sponnoble*, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969). However, "discovery of the cause of a problem . . . does not always result in a patentable invention. . . . [A] different situation exists where the solution is obvious from prior art which contains the same solution for a similar problem." *In re Wiseman*, 596 F.2d 1019, 1022, 201 USPQ 658, 661 (CCPA 1979) (emphasis in original).

Furthermore, the Examiner has not pointed out a particular finding as to the specific understanding or principle within the knowledge of a skilled artisan, either expressly or by implication that would have motivated one with no knowledge to combine or modify Koma. Applicant respectfully submits that no proper motivation or suggestion is found for one of ordinary skill in the art to modify Koma to arrive at the claimed device. Further, such combination is suggested only by the claimed invention, which is considered impermissible hindsight reconstruction. Through the combination of references used by the Examiner, he has taken a specific aspect of the claim, i.e., photo-alignment, to be the only advantage of the invention, and disregarded the other elements of the claim. Accordingly, Applicant respectfully requests withdrawal of the rejection based on the combination of references. Applicant respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness. Applicant respectfully requests that the rejection under 35 USC § 103(a) be withdrawn.

One of ordinary skill in this art would not modify Koma by subjecting the orientation film to the photo-alignment process described in Auman et al. because such an arrangement would teach away from the disclosure and purpose of Koma.

Applicants submit that there is no motivation to combine these two references. None of the cited references teaches or suggests an electric field inducing window and a photo-alignment layer as recited at least by claims 1 and 29. Applicants submit that claims 1 and 29 are allowable over the cited references. Applicants respectfully request that the rejection under 35 USC § 103(a) be withdrawn.

Moreover, claims 2-5, 7-22, 24, 26-28, 30-33, 35-50, 52, and 54-56 are allowable by virtue of their dependence on claims 1 and 29, which are believed to be allowable.

The Examiner rejected claims 6 and 34 under 35 USC § 103(a) as being unpatentable over Koma (US Patent No. 5,608,556) in view of Auman et al. (US Patent No. 6,139,926), and further in view of Koma et al., "No-Rub Multi-Domain TFT Using Surrounding-Electrode Method." The Examiner rejected claims 23 and 25 under 35 USC § 103(a) as being unpatentable over Koma (US Patent No. 5,608,556) in view of Auman et al. (US Patent No. 6,139,926), and further in view of Bos et al. (US Patent No. 6,141,074). The Examiner rejected claims 51 and 53 under 35 USC § 103(a) as being unpatentable over Koma (US Patent No. 5,608,556) in view of Auman et al. (US Patent No. 6,139,926), and further in view of Van De Witte (US Patent No. 5,936,692). Applicants respectfully traverse these rejections.

As discussed above, none of the cited references teaches or suggest the photo-alignment layer as recited by at least claims 1 and 29. None of the cited references, singly or in combination, teaches or suggests this feature. Koma et al., Bos et al., and Van De Witte fail to cure the deficiencies of Koma and Auman et al. Applicants submit that claims 6, 23, 25, 34, 51, and 53 are allowable by virtue of their dependence on independent claims 1 and 29, which are

believed to be allowable. Applicants respectfully request that the rejections under 35 USC § 103(a) be withdrawn.

Should the Examiner deem that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7371.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136. Please credit any overpayment to deposit Account No. 50-0911.

Dated: October 29, 2002

Respectfully submitted,

By _____
Teresa M. Arroyo
Registration No.: 50,015
MCKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, DC 20006
Telephone: (202) 496-7500
Facsimile: (202) 496-7756
Attorneys for Applicant